

**Special ones:** NIE's Dr Diong with the turtles, which have been fitted with tracking devices that enable scientists to study their migratory patterns



The satellite tag bears the NTU stamp!

# SINGAPORE'S FIRST Sea Turtle tracking study



Twelve marine turtles were released from the safe confines of Underwater World Singapore into the open sea on 1 August. They were tagged and set free as part of a year-long project by NTU's National Institute of Education (NIE) to study their migratory patterns

**Delicate task:**  
Dr Diong and the ship's crew releasing an Olive Ridley



**Goodbye, and good luck!**  
Minister Mah Bow Tan gives this Loggerhead a wet send-off



**A Green Turtle surfaces to breathe,** showing its double satellite tag

Fitted with tracking devices, eight Green Turtles, two Olive Ridelys and two Loggerheads had their first taste of freedom when they were released into the ocean.

Not only will these turtles learn to survive in the wild and adapt to their natural habitat, they will also fulfil a noble task in the process – helping scientists gather information to unlock some mysteries about their migratory patterns and navigational instincts.

At a "send-off" ceremony, Minister for National Development Mr Mah Bow Tan symbolically released the turtles by splashing water on them. The turtles then boarded a Pacific International Lines container vessel, *Kota Hadiah*, and headed into the South China Sea.

Each turtle was fitted with a satellite transmitter equipped with a location sensor

and a pressure transducer to capture their detailed diving patterns. A few had double tags. This work of fitting the turtles involved an international team comprising Dr C H Diong, Principal Investigator of the Sea Turtle Satellite Tracking Project from NIE; George Balazs, a National Oceanic & Atmospheric Administration biologist with the United States National Marine Fisheries, Pacific Islands Fisheries Science Centre in Hawaii, and one of the world's foremost sea turtle biologists; Marc Rice, Science and Technology Coordinator, Hawaii Preparatory Academy; and Yaro Cai, a research biologist from the Institute of Marine Biology, National Taiwan Ocean University.

Dr Diong explains that the study aims to determine the migratory behaviour of the turtles. "We want to compare inter-specific differences in open sea movements between these captive turtles and their

wild counterparts, and to assess any similarities or differences in their long-distance travel and diving behaviours."

He adds that such tracking studies would benefit the world's oceanariums – such as Underwater World Singapore in Sentosa – and help further sea turtle conservation. The studies will also shed light on how turtles use navigational cues for long-distance travel in the open sea after a period of captivity.